

## **Field Methods**

### **Learner Outcomes**

The learner will

- Demonstrate proper plague protection and precaution methods.
- Display knowledge of animal observation methods and record keeping techniques.
- Perform data collection and sampling techniques for acquiring transect data.
- Demonstrate and discuss skills to do low impact camping in environmentally sensitive areas.
- Discuss severe weather precautions that one needs for safety and survival.
- Demonstrate knowledge and use of navigation skills.
- Convey an understanding of proper survival behavior.

### **Background**

Fieldwork involves preparation in terms of training and planning. In the field, a person has to be self-motivated to complete a given task, constantly aware of the surroundings and changing conditions and be able to overcome adversity.

### **Materials**

- Supplements numbers 3.30 through 3.36
- Examples of proper field clothes
- Examples of proper kind of flea-tick repellent
- Overhead projector
- Chalkboard
- Field guide suitable for identifying local plants
- Examples of typical plants
- Items for constructing training transect on campus: large nails, metric measuring tape, hammer and short pieces of re-bar
- Plumb-bob and string (for collecting plant transect data)
- Meter stick
- Topographical map
- Star map
- Compass – several examples (Silva, Brunton, etc.)
- Watch with hands (not digital)
- Dehydrator for red meats and fruits
- Prepare trail mix and field foods: plastic bags, seasoning, cereals and nuts

### **Assessments**

- Post-test
- Work sheets
- Field journal

Activity #1

#### **Pre-test**

20 minutes

### **Procedure**

The teacher will

- Administer the pre-test.

Activity #2

### **Plague Protection and Precautions**

20 minutes

### **Procedure**

The teacher will

- Demonstrate examples of proper field clothing.
- Discuss examples of proper kinds of flea-tick repellent.
- Instruct students in the proper handling of animals and the need for a valid tetanus vaccination. (School districts may impose other requirements, such as rabies vaccination. Check with school officials for current requirements.)

Activity #3

### **Animal Observation Methods**

1 class period

### **Procedure**

The teacher will

- Explain to students how to gather information and observe wild animals in the field.
- Review the Prairie Dog Behaviors Checklist and Field Methods Prairie Dog data sheets so students may practice observation methods in a lab simulation.
- Instruct students to keep a notebook of activities.

Activity #4

### **Data Collection and Sampling Technique**

3 class periods

### **Procedure**

The teacher will

- Allow students to examine selected plants in the lab and use field guide to identify plants.
- Instruct students on how to take transect data.
- Have students use a compass transect to practice sampling plant data.

Activity # 5  
**Field Preparations**  
2 class periods

**Procedure**

The teacher will

- Have students explain the necessity of low impact camping in environmentally sensitive areas such as national parks.
- Have students prepare dehydrated foods and plan a two-day low impact camping trip.
- Discuss with students weather precautions, map reading, finding directions and survival behavior.
- Locate and identify landmarks using topographical maps.
- Have students demonstrate how to use a topographical map and compass using the Topographical Map work sheet.
- Allow students to demonstrate how to find directions using the star Polaris, the Sun and a watch.

Activity #6  
**Post-test**  
20 minutes

**Procedure**

The teacher will

- Administer post-test to assess knowledge gained.

**Students must answer each question correctly before participating in field studies. The test may be written or oral. Students may take the test as many times as is necessary to achieve a 100% rating.**